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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,458	06/21/2007	Fabrizio Favaretto	ST 0104 PUS	3700
John A. Artz	7590 02/22/2008		EXAMINER	
Artz & Artz	1 D 1		CHENEVERT, PAUL A	
suite 250	28333 Telegraph Road suite 250			PAPER NUMBER
Southfield, MI 48034			3612	
			MAIL DATE	DELIVERY MODE
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/583,458	FAVARETTO, FABRIZIO				
Office Action Summary	Examiner	Art Unit				
	Paul A. Chenevert	3612				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY	/ IS SET TO EXPIRE 3 MONTH(	S) OR THIRTY (30) DAVS				
WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 21 Ju	ine 2007.					
·— · · · · · · · · · · · · · · · · · ·						
3) Since this application is in condition for allowar						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-15,17 and 18</u> is/are rejected.						
7)⊠ Claim(s) <u>16</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>19 June 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3.☑ Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachmont/o)						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  Other:						
1 apor restorman parto						

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#### **DETAILED ACTION**

#### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Information Disclosure Statement

2. The references cited in the Search Report Form PCT/ISA/210 filed 19JUN06 have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing, preferably on a PTO/SB/08A and 08B form, must be filed within the set period for reply to this Office action.

#### **Drawings**

3. The drawings are objected to because it is unclear in Figure 5-8 how the linear bars (2) are joined with the jointing body (3). This is especially confusing in Figure 5 for the front engine and floor level C-pillar jointing bodies; it appears that the linear bar is not touching any jointing body at these two location pairs. In Figures 6 & 7 it is thought that there should be some type of insertion inlet holes on the jointing body to allow for the four longitudinal linear bars to be joined. In Figure 8, it is thought that there should be one insertion inlet hole on the front plane-closing metal sheet (7) to allow for the translational linear bar over the engine compartment to be inserted into the jointing body.

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4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the forming of the load bearing element by the lateral union of a number of simple elements (claims 2-5 & 10-13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## **Specification**

6. The disclosure is objected to because of the following informalities: page 2, line 20, these two paragraphs referencing claim numbers should be deleted.

Appropriate correction is required.

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# Claim Objections

- 7. Claims 1-18 are objected to because of the following informalities:
  - a. Claim 1, line 1, "made up of the union of a plurality of extruded elements (2); the frame (1)" is duplicative and should be deleted.
  - b. Claim 1, line 16, "the" should be inserted before "opposite".
  - c. Claim 1, line 17, "itself" should be deleted.
  - d. Claim 2, line 1, "a load-bearing element" should be changed to "the load-bearing element".
  - e. Claim 3, line 2, "a load-bearing element" should be changed to "the load-bearing element".
  - f. Claim 4, line 2, "a load-bearing element" should be changed to "the load-bearing element".
  - g. Claim 6, line 4, "an FSW" should be changed to "a Friction Stir Welding".
  - h. Claim 7, line 3, "plane" should be changed to "closing".
  - i. Claim 8, should be rewritten to read "A motor vehicle provided with a metal frame (1) built according to any one of Claims 1 to 7."
  - j. Claim 9, line 2, "made up of the union of a plurality of extruded elements (2); the method" is duplicative and should be deleted.
  - k. Claim 9, line 3, "envisaging" should be changed to "comprising".
  - 1. Claim 9, line 18, "itself" should be deleted.
  - m. Claim 10, line 1, "a load-bearing element" should be changed to "the load-bearing element".

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n. Claim 11, line 2, "a load-bearing element" should be changed to "the load-bearing element".

- o. Claim 12, line 2, "a load-bearing element" should be changed to "the load-bearing element".
- p. Claim 14, line 4, "an FSW" should be changed to "a Friction Stir Welding".
- q. Claim 15, line 5, "itself" should be deleted.
- r. Claim 16, line 2, "at least one closing metal sheet" should be changed to "at least one of the plane closing metal sheets (7)".
- s. Claim 16, line 5, "itself" should be deleted.
- t. Claim 17, line 2, "a jointing body" should be changed to "the jointing body".
- u. Claim 17, line 3, "plane" should be changed to "closing".
- v. Claim 18, line 4, "itself" should be deleted.

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 2-5 & 10-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

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relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. See drawing objection above.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 9 & 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Chihara (JP

04-312639 A; 04NOV92).

Extrusion methods and welding methods are process steps not given patentable weight in

a product claim.

Chihara discloses a metal frame comprising a plurality of linear bars (12-14), which have

a constant cross section, can be obtained by extrusion, and can be joined to one another by means

of welding at structural nodes defined by jointing bodies (1); each jointing body has a number of

respective pockets; each jointing body is of a box type and is made up of the union of a

respective load-bearing element (5), which can be substantially obtained by extrusion and could

have a given direction of extrusion, with at least one pair of plane closing metal sheets (2, 3),

which are set perpendicular to the direction of extrusion and could be welded to the load-bearing

element on opposite sides of the load-bearing element.

In regards to the method claims 9 & 15, the reference could teach the method of

connection of the parts.

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In regards to claim 15, the closing metal sheets could be welded to the load-bearing element prior to coupling the respective linear bars to the load-bearing element.

# Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims 7 & 17 and claims 2, 5, 10 & 13, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Chihara (639) in view of Chihara (JP 04-302631 A; 26OCT92).

Chihara (639) discloses a frame as described above.

However, Chihara (639) does not expressly disclose that the load-bearing element is formed by the lateral union of a number of simple elements, each of which could be obtained directly via extrusion and could have a given direction of extrusion parallel to the direction of extrusion of the other simple elements, that the simple elements are the same as one another, nor that the jointing body includes one further closing metal sheet set parallel to the direction of extrusion and could be welded to the load bearing element to define a respective pocket.

Chihara (631) discloses a metal frame comprising a plurality of linear bars (3-5), which have a constant cross section, can be obtained by extrusion, and can be joined to one another by means of welding at structural nodes defined by jointing bodies (20); each jointing body has a number of respective pockets; each jointing body is of a box type and is made up of the union of

a respective load-bearing element (21), which can be substantially obtained by extrusion and could have a given direction of extrusion, the load-bearing element is formed by the lateral union of a number of simple elements (25), each of which could be obtained directly via extrusion and could have a given direction of extrusion parallel to the direction of extrusion of the other simple elements; the simple elements are the same as one another, and the jointing body includes one further closing metal sheet (25) set parallel to the direction of extrusion and could be welded to the load bearing element to define a respective pocket; with at least one pair of plane closing metal sheets (22, 23), which are set perpendicular to the direction of extrusion and could be welded to the load-bearing element on opposite sides of the load-bearing element.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the frame of Chihara (639), to employ simple elements, as taught by Chihara (631).

The suggestion/motivation for doing so would have been to allow the jointing body to be employed in one-axis (Figures 7 & 8), two-axis (Figures 3-6) and three-axis (Figures 1 & 2) corner orientations, as is desired in this vehicle invention.

Therefore, it would have been a desirable and thus a prima facie obvious modification of the frame of Chihara (639) by combining simple elements with the jointing body to obtain the invention as specified in claims 2, 5, 7, 10, 13 & 17, as taught by the prior references' motivation, and not hindsight from the Applicant's disclosure.

14. Claims 6, 14 & 18 and claims 3, 4, 11 & 12, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Chihara, as modified, as applied to claims 2 & 10 above, and further in view of obvious common knowledge.

Chihara, as modified, disclose a frame as described above.

However, Chihara, as modified, do not expressly disclose the welding or slotting connection method.

The Examiner hereby takes Official Notice that selecting a slotting or welding connection method is an obvious design choice, which was notoriously well known to a person having ordinary skill in the art at the time of the invention.

The suggestion/motivation for doing so would have been to allow for a strong connection, as is desired in this vehicle invention.

Therefore, it would have been a desirable and thus a prima facie obvious modification of the frame of Chihara, as modified, by employing a slotting or welding connection method to obtain the invention as specified in claims 3, 4, 6, 11, 12, 14 & 18, as taught by the prior references' motivation and obvious common knowledge, and not hindsight from the applicants disclosure.

15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chihara as applied to claim 1 above, and further in view of Panoz (US 6,470,990 B1; 29OCT02).

Chihara discloses a frame as described above.

However, Chihara does not expressly disclose that the frame is a motor vehicle frame.

Panoz discloses a motor vehicle provided with a metal frame made up of the union of a plurality of extruded elements and joined at a jointed body (58).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the frame of Chihara, to employ the frame on a motor vehicle, as taught by Panoz.

The suggestion/motivation for doing so would have been to join extruded linear bars, as is desired in this vehicle invention.

Therefore, it would have been a desirable and thus a prima facie obvious modification of the frame of Chihara by employing the jointing body on a motor vehicle to obtain the invention as specified in claim 8, as taught by the prior references' motivation, and not hindsight from the Applicant's disclosure.

# Allowable Subject Matter

- 16. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 17. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not show or make obvious Applicant's closing metal sheet capable of being welded to the load bearing element after coupling the linear bars.

### Conclusion

- 18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Chenevert whose telephone number is (571)272-6657. The examiner can normally be reached on Mon-Fri (8:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn D. Dayoan can be reached on 571-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Glenn Dayoan/ Supervisory Patent Examiner, Art Unit 3612 Paul A. Chenevert Examiner Art Unit 3612

PAC 14FEB08